

November 12, 2025

Chiyoda's Accumulator Inspection Methodology to Reduce Hydrogen Station Operating Costs selected as part of Tokyo Metropolitan Government's Project to Promote Hydrogen Utilization

Chiyoda Corporation (Chiyoda) is pleased to announce that its accumulator inspection methodology to reduce hydrogen station operating costs has been selected by the Tokyo Metropolitan Government as part of their project to promote technology development for hydrogen utilization (project).

The Tokyo Metropolitan Government is implementing the project to resolve issues related to expanding hydrogen utilization. A key issue in a hydrogen society is the high cost of accumulator maintenance (ie: open inspection, replacement etc) borne by hydrogen service station (Hydrogen SS) operators nationwide, delaying Hydrogen SS maintenance and constraining the spread of fuel cell vehicle (FCV) and heavy-duty commercial vehicle (HDV) mobility.

Hydrogen SS operators conventionally shut down their facilities for open inspection and conduct visual inspections using a fiberscope. The introduction of Chiyoda's new non-open inspection method for Hydrogen SS accumulators (method^{*1}) enables in-service inspections of Hydrogen SS accumulators, meaning open inspections are not required, reducing operator maintenance and management costs and improving facility availability.

Chiyoda aims to further promote hydrogen utilization in the key areas, including Tokyo, for promoting the introduction of FCVs by expanding awareness of the method among Hydrogen SS operators, local governments and certification bodies, and implement it in society in cooperation with an inspection company. Following completion of the project, Chiyoda will continue promoting application of the method through O&M Mother^{*2} (the core of plantOS^{TM*3}) to realize safer and more efficient Hydrogen SS operations nationwide and support the safe and comfortable lives of local citizens.

Through the project, Chiyoda continues contributing to the development of a sustainable society under our purpose of 'Enriching Society through Engineering Value'.

^{*1} A sensor installed outside the accumulator acquires and analyzes signals using acoustic emission technology while the facility is in operation, thereby diagnosing the presence and progression of cracks. The method is standardized as NDIS2436 by Japan Nondestructive Testing Organization and officially approved for use in specific accumulators in compressed hydrogen stands in FY2024 under the 'High Pressure Gas Safety Association KHK/JPEC S 0850-9 (2024) and KHK/JPEC S 1850-9 (2024)' guidelines.

^{*2} Chiyoda's plant maintenance and monitoring service, utilizing the latest sensors and IoT technologies.

*3 Chiyoda's trademark O&M total operation and maintenance support service platform. A hybrid fusion of our group's field-centric physical support in the field of maintenance for industrial equipment and plants and the latest digital technologies, such as advanced analysis and analysis services, IoT, cloud computing and AI developed over many years.

For further information, please contact:

Chiyoda Corporation

IR, PR & Sustainability Advanced Section

Email: chiyoda_pr@chiyodacorp.com

URL: <https://www.chiyodacorp.com/en/contact/index.php>